



North Carolina Department of Environment and Natural Resources

Dexter R. Matthews, Director

Division of Waste Management

Michael F. Easley, Governor
William G. Ross Jr., Secretary

May 15, 2008

Mr. Nick Marotta
Waste Corporation of America
625 Spencer Drive
Fort Walton Beach, FL 32547

Re: *Alternate Source Demonstration*
Material Recovery, LLC Construction and Demolition Landfill, Permit #92-31

Dear Mr. Marotta:

The Solid Waste Section has reviewed the *November 5, 2007 Alternate Source Demonstration* submitted on behalf of the Waste Corporation of America (WCA) by Golder Associates NC, Inc. for the unlined Material Recovery, LLC Construction and Demolition Landfill located in Wake County. The volatile organic compound, trichlorofluoromethane, is being detected above the reporting limit of 1 ug/L in the downgradient compliance groundwater monitoring well MW-3, and as a result, an Alternate Source Demonstration (ASD) was submitted to the Solid Waste Section. In June 2007, groundwater samples were voluntarily analyzed for the parameters listed in 15A NCAC 13B .0544. The facility is currently subject to 15A NCAC 13B .0601 under its existing permit.

During the June 2007 semiannual groundwater sampling event, trichlorofluoromethane was detected above the reporting limit in groundwater monitoring well MW-3 at 11 ug/L (North Carolina 2L Standard is 2,100 ug/L). A confirmation sampling event was conducted in August 2007. Groundwater samples from monitoring wells MW-1 and MW-3 were also analyzed for additional water quality parameters. The results confirmed that trichlorofluoromethane is being detected above the reporting limit at the facility. Since the facility does not have a leachate collection system, a site specific leachate sample could not be collected; however, typical concentrations of leachate at construction and demolition landfills were used for comparisons to the data collected for MW-1 and MW-3. In addition, headspace methane concentrations were monitored to determine if soil gas impacts to groundwater may be a possible source. The *Alternate Source Demonstration* stated, "While this ASD has not verified the source of trichlorofluoromethane impacts to groundwater in the vicinity of MW-3, this evaluation has ruled out leachate as a likely source."

During the December 2007 semiannual groundwater sampling event, trichlorofluoromethane was again detected above the reporting limit in groundwater monitoring well MW-3 at 23 ug/L.

As a result, the *Alternate Source Demonstration* is approved as described. Please continue groundwater monitoring for the parameters designated in 15A NCAC 13B .0544. Please also continue to obtain headspace methane concentrations to evaluate potential landfill gas impacts to the groundwater. If the concentration of

trichlorofluoromethane continues to increase, please conduct additional activities to determine the potential source. Please call me at (919) 508-8500 if you have any questions or concerns regarding this letter.

Sincerely,



Jaclynne Drummond
Hydrogeologist
Environmental Compliance
Solid Waste Section

cc: Dennis Gehle, Material Recovery, LLC
Rachel Kirkman, Golder Associates
Mark Poindexter, Field Operations Supervisor
Jason Watkins, Central District Supervisor
Brad Bailey, Environmental Specialist
Solid Waste Central Files